



#### ASTM D7264 Testing Fixture

This test method determines the flexural properties (including strength, stiffness, and load/deflection behavior) of polymer matrix composite materials under the conditions defined. Procedure A is used for three-point loading and Procedure B is used for four-point loading.

Procedure A—A three-point loading system utilizing center loading on a simply supported beam.

Procedure B—A four-point loading system utilizing two load points equally spaced from their adjacent support points, with a distance between load points of one-half of the support span.

Flexural properties determined by these procedures can be used for quality control and specification purposes, and may find design applications. These procedures can be useful in the evaluation of multiple environmental conditions to determine which are design drivers and may require further testing. These procedures may also be used to determine flexural properties of structures.

ASTM D 7264 recommends a specimen span length-to-thickness ratio of 32:1, but permits use of the other ratios as well. For a typical 0.1"

thick specimen and a commonly used span length-to-thickness ratio of 16:1, this corresponds to a support span of 1.6", with at least an additional 10 percent (0.25" minimum) specimen overhang at each end being specified in the standards.. To accommodate various types of materials, specimen thicknesses, and span length-to-thickness ratios, the support span length of the fixture is infinitely adjustable over the full range of span lengths up to 8".



ASTM D 7264 Testing Fixture - Drawing

Test Standard	ASTM D 7264 / D 790 / D 6272 / D 4476 / ISO 178 / ISO 14125 / ISO 3597-2 / EN 2562 / EN 2746
Maximum Load	30 kN
Temperature Range	da -80 °C a 149 °C
Specimen Thickness	1-10 mm
Specimen Width	74 mm

Specimen Length	up to 340 mm
Mass	20.00 kg



ASTM D 7264 Testing Fixture - Assembly

## Referenced Documents

## ASTM Standards

- D790 Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- D2344/D2344M Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates
- D3878 Terminology for Composite Materials